

10/522086

SEQUENCE LISTING

DT01 Rec'd PCT/PTC 21 JAN 2005

<110> Koga , Takaki
Suzuki, Tsukasa
Saito, Hiroyuki

<120> NON-NEUTRALIZING ANTI-aPC ANTIBODIES

<130> 14875-138US1

<150> PCT/JP2003/009087

<151> 2003-07-17

<150> JP 2002-212582

<151> 2002-07-22

<160> 34

<170> PatentIn version 3.1

<210> 1

<211> 117

<212> PRT

<213> Mus musculus

<400> 1

Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Leu Ala Arg Pro Gly Ala
1 5 10 15

Ser Val Lys Leu Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Asp Ser
20 25 30

Tyr Met Asn Trp Val Lys Gln Arg Thr Gly Gln Gly Leu Glu Trp Ile
35 40 45

Gly Glu Val Tyr Pro Glu Thr Gly Asn Ser Tyr Tyr Asn Glu Lys Phe
50 55 60

Lys Gly Lys Ala Thr Leu Thr Ala Asp Arg Ser Ser Lys Thr Ala Tyr
65 70 75 80

Met Gln Leu Asn Ser Leu Thr Ser Glu Asp Ser Ala Val Tyr Phe Cys
85 90 95

Thr Arg Gly Gly Thr Gly Phe Asp Tyr Trp Gly Gln Gly Thr Thr Leu
100 105 110

Thr Val Ser Ser Ala
115

<210> 2

<211> 121

<212> PRT

<213> Mus musculus

<400> 2

Gln Val Gln Leu Gln Gln Ser Gly Pro Glu Leu Val Lys Pro Gly Ala
 1 5 10 15
 Ser Val Lys Ile Ser Cys Lys Ala Ser Gly Tyr Ala Phe Ser Ser Ser
 20 25 30
 Trp Met Asn Trp Val Lys Gln Arg Pro Gly Gln Gly Leu Glu Trp Ile
 35 40 45
 Gly Arg Ile Tyr Pro Gly Asp Gly Asp Thr Asn Tyr Asn Gly Lys Phe
 50 55 60
 Arg Gly Lys Ala Thr Leu Thr Ala Asp Lys Ser Ser Ser Thr Ala Tyr
 65 70 75 80
 Met Gln Leu Thr Ser Leu Thr Ser Val Asp Ser Ala Val Tyr Phe Cys
 85 90 95
 Ala Arg Trp Gly Ile Thr Thr Ala Ala Trp Phe Ala Tyr Trp Gly Gln
 100 105 110
 Gly Thr Leu Val Thr Val Ser Ala Ala
 115 120

<210> 3

<211> 116

<212> PRT

<213> Mus musculus

<400> 3

Gln Ile Gln Leu Val Gln Ser Gly Pro Glu Leu Glu Lys Pro Gly Glu
 1 5 10 15
 Thr Val Arg Ile Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Asp Tyr
 20 25 30
 Ser Leu His Trp Val Lys Gln Ala Pro Gly Lys Gly Leu Lys Trp Met
 35 40 45
 Gly Trp Ile Asn Thr Glu Thr Gly Glu Pro Thr Tyr Ala Asp Asp Leu
 50 55 60
 Lys Gly Arg Phe Ala Phe Ser Leu Glu Thr Ser Ala Thr Thr Ala Tyr
 65 70 75 80
 Leu Gln Ile Asn Asn Leu Lys Asn Glu Asp Thr Ala Thr Tyr Phe Cys
 85 90 95
 Ala Arg Gly Ile Thr Leu Asp Tyr Trp Gly Gln Gly Thr Ser Leu Thr
 100 105 110
 Val Ser Ser Ala
 115

<210> 4
 <211> 121
 <212> PRT
 <213> Mus musculus

<400> 4

Gln	Val	Gln	Leu	Gln	Gln	Ser	Gly	Ser	Glu	Val	Val	Lys	Pro	Gly	Ala	1	5	10	15
Ser	Val	Lys	Ile	Ser	Cys	Lys	Ala	Ser	Gly	Tyr	Ala	Phe	Ser	Arg	Ser	20	25	30	
Trp	Met	Asn	Trp	Val	Lys	Gln	Arg	Pro	Gly	Gln	Gly	Leu	Glu	Trp	Ile	35	40	45	
Gly	Arg	Ile	Tyr	Pro	Gly	Asp	Gly	Asp	Ser	Ile	Tyr	Asn	Gly	Lys	Phe	50	55	60	
Lys	Gly	Lys	Ala	Thr	Leu	Thr	Ala	Asp	Lys	Ser	Ser	Thr	Thr	Ala	Tyr	65	70	75	80
Met	His	Leu	Asn	Ser	Leu	Thr	Ser	Val	Asp	Ser	Ala	Val	Tyr	Phe	Cys	85	90	95	
Ala	Arg	Trp	Gly	Ser	Ser	Gly	Ser	Ser	Trp	Phe	Ala	Tyr	Trp	Gly	Gln	100	105	110	
Gly	Thr	Leu	Val	Thr	Val	Ser	Ala	Ala								115	120		

<210> 5
 <211> 108
 <212> PRT
 <213> Mus musculus

<400> 5

Gln	Ile	Val	Leu	Ala	Gln	Ser	Pro	Ala	Ile	Met	Ser	Ala	Ser	Leu	Gly	1	5	10	15
Glu	Arg	Val	Thr	Met	Thr	Cys	Thr	Ala	Ser	Ser	Ser	Val	Ser	Ser	Ser	20	25	30	
Tyr	Leu	His	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Ser	Ser	Pro	Lys	Ala	Trp	35	40	45	
Ile	Tyr	Ser	Thr	Ser	Asn	Leu	Ala	Ser	Gly	Ala	Pro	Thr	Arg	Phe	Ser	50	55	60	
Gly	Ser	Gly	Ser	Gly	Thr	Ser	Tyr	Ser	Leu	Thr	Ile	Ser	Ser	Met	Glu	65	70	75	80
Ala	Glu	Asp	Ala	Ala	Thr	Tyr	Tyr	Cys	His	Gln	Tyr	His	Arg	Ser	Pro				

85

90

95

Phe Thr Phe Gly Ser Gly Thr Lys Leu Glu Ile Lys
 100 105

<210> 6
 <211> 107
 <212> PRT
 <213> Mus musculus

<400> 6

Asp Ile Gln Met Thr Gln Ser Pro Ala Ser Leu Ser Ala Ser Val Gly
 1 5 10 15

Glu Thr Val Thr Ile Thr Cys Arg Thr Ser Glu Asn Ile Tyr Ser Tyr
 20 25 30

Leu Ala Trp Tyr Gln Gln Lys Gln Gly Lys Ser Pro Gln Leu Leu Val
 35 40 45

Asn Asn Ala Lys Thr Leu Ala Glu Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60

Ser Gly Ser Gly Thr Gln Phe Ser Leu Lys Ile Asn Ser Leu Gln Pro
 65 70 75 80

Glu Asp Phe Gly Thr Tyr Tyr Cys Gln His Tyr Tyr Gly Thr Pro Pro
 85 90 95

Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys
 100 105

<210> 7
 <211> 113
 <212> PRT
 <213> Mus musculus

<400> 7

Asp Asn Val Met Ser Gln Ser Pro Ser Ser Leu Ala Val Ser Val Gly
 1 5 10 15

Glu Lys Val Thr Met Ser Cys Lys Ser Ser Gln Ser Leu Leu Ser Ser
 20 25 30

Ser Asn Gln Lys Asn Phe Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln
 35 40 45

Ser Pro Lys Leu Leu Ile Ser Trp Ala Ser Thr Arg His Ser Gly Val
 50 55 60

Pro Asp Arg Phe Thr Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
 65 70 75 80

Ile Ser Ser Val Asn Ala Glu Asp Leu Ala Val Tyr Tyr Cys Gln Gln
 85 90 95

Tyr Tyr Arg Tyr Pro Leu Thr Phe Gly Ala Gly Thr Lys Leu Glu Leu
 100 105 110

Lys

<210> 8
 <211> 107
 <212> PRT
 <213> Mus musculus

<400> 8

Asp Ile Gln Met Thr Gln Ser Pro Ala Ser Leu Ser Ala Ser Met Gly
 1 5 10 15

Glu Thr Val Thr Ile Thr Cys Arg Thr Ser Glu Asn Ile Tyr Ser Tyr
 20 25 30

Leu Ala Trp Tyr Arg Gln Lys Gln Gly Lys Ser Pro Gln Leu Leu Val
 35 40 45

Tyr Asn Ala Lys Thr Leu Ala Glu Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60

Ser Gly Ser Gly Thr Gln Phe Ser Leu Arg Ile Asn Ser Leu Gln Pro
 65 70 75 80

Glu Asp Phe Gly Ser Tyr Phe Cys Gln His Tyr Tyr Gly Ser Pro Tyr
 85 90 95

Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys
 100 105

<210> 9
 <211> 5
 <212> PRT
 <213> Mus musculus

<400> 9

Asp Ser Tyr Met Asn
 1 5

<210> 10
 <211> 17
 <212> PRT
 <213> Mus musculus

<400> 10

Glu Val Tyr Pro Glu Thr Gly Asn Ser Tyr Tyr Asn Glu Lys Phe Lys
 1 5 10 15

Gly

<210> 11
 <211> 7
 <212> PRT
 <213> Mus musculus

<400> 11

Gly Gly Thr Gly Phe Asp Tyr
 1 5

<210> 12
 <211> 5
 <212> PRT
 <213> Mus musculus

<400> 12

Ser Ser Trp Met Asn
 1 5

<210> 13
 <211> 17
 <212> PRT
 <213> Mus musculus

<400> 13

Arg Ile Tyr Pro Gly Asp Gly Asp Thr Asn Tyr Asn Gly Lys Phe Arg
 1 5 10 15

Gly

<210> 14
 <211> 11
 <212> PRT
 <213> Mus musculus

<400> 14

Trp Gly Ile Thr Thr Ala Ala Trp Phe Ala Tyr
 1 5 10

<210> 15
 <211> 5
 <212> PRT

<213> Mus musculus

<400> 15

Asp Tyr Ser Leu His
1 5

<210> 16

<211> 17

<212> PRT

<213> Mus musculus

<400> 16

Trp Ile Asn Thr Glu Thr Gly Glu Pro Thr Tyr Ala Asp Asp Leu Lys
1 5 10 15

Gly

<210> 17

<211> 6

<212> PRT

<213> Mus musculus

<400> 17

Gly Ile Thr Leu Asp Tyr
1 5

<210> 18

<211> 5

<212> PRT

<213> Mus musculus

<400> 18

Arg Ser Trp Met Asn
1 5

<210> 19

<211> 17

<212> PRT

<213> Mus musculus

<400> 19

Arg Ile Tyr Pro Gly Asp Gly Asp Ser Ile Tyr Asn Gly Lys Phe Lys
1 5 10 15

Gly

<210> 20
 <211> 11
 <212> PRT
 <213> Mus musculus

<400> 20

Trp Gly Ser Ser Gly Ser Ser Trp Phe Ala Tyr
 1 5 10

<210> 21
 <211> 12
 <212> PRT
 <213> Mus musculus

<400> 21

Thr Ala Ser Ser Ser Val Ser Ser Ser Tyr Leu His
 1 5 10

<210> 22
 <211> 11
 <212> PRT
 <213> Mus musculus

<400> 22

Ser Thr Ser Asn Leu Ala Ser Gly Ala Pro Thr
 1 5 10

<210> 23
 <211> 7
 <212> PRT
 <213> Mus musculus

<400> 23

Tyr His Arg Ser Pro Phe Thr
 1 5

<210> 24
 <211> 11
 <212> PRT
 <213> Mus musculus

<400> 24

Arg Thr Ser Glu Asn Ile Tyr Ser Tyr Leu Ala
 1 5 10

<210> 25

<211> 11
 <212> PRT
 <213> Mus musculus

<400> 25

Asn Ala Lys Thr Leu Ala Glu Gly Val Pro Ser
 1 5 10

<210> 26
 <211> 7
 <212> PRT
 <213> Mus musculus

<400> 26

Tyr Tyr Gly Thr Pro Pro Thr
 1 5

<210> 27
 <211> 17
 <212> PRT
 <213> Mus musculus

<400> 27

Lys Ser Ser Gln Ser Leu Leu Ser Ser Ser Asn Gln Lys Asn Phe Leu
 1 5 10 15

Ala

<210> 28
 <211> 12
 <212> PRT
 <213> Mus musculus

<400> 28

Ser Trp Ala Ser Thr Arg His Ser Gly Val Pro Asp
 1 5 10

<210> 29
 <211> 7
 <212> PRT
 <213> Mus musculus

<400> 29

Tyr Tyr Arg Tyr Pro Leu Thr
 1 5

<210> 30
 <211> 7
 <212> PRT
 <213> Mus musculus

<400> 30

Tyr Tyr Gly Ser Pro Tyr Thr
 1 5

<210> 31
 <211> 5
 <212> PRT
 <213> Artificial

<220>
 <223> heavy chain CDR1

<220>
 <221> MISC_FEATURE
 <222> (1)..(1)
 <223> "Xaa" at location 1 stands for Ser or Arg

<400> 31

Xaa Ser Trp Met Asn
 1 5

<210> 32
 <211> 17
 <212> PRT
 <213> Artificial

<220>
 <223> heavy chain CDR2

<220>
 <221> MISC_FEATURE
 <222> (9)..(9)
 <223> "Xaa" at location 9 stands for Thr or Ser

<220>
 <221> MISC_FEATURE
 <222> (10)..(10)
 <223> "Xaa" at location 10 stands for Asn or Ile

<220>
 <221> MISC_FEATURE
 <222> (16)..(16)
 <223> "Xaa" at location 16 stands for Arg or Lys

<400> 32

Arg Ile Tyr Pro Gly Asp Gly Asp Xaa Xaa Tyr Asn Gly Lys Phe Xaa

1	5	10	15
Gly			

```

<210> 33
<211> 11
<212> PRT
<213> Artificial

<220>
<223> heavy chain CDR3

<220>
<221> MISC_FEATURE
<222> (3)..(3)
<223> "Xaa" at location 3 stands for Ile or Ser

<220>
<221> MISC_FEATURE
<222> (4)..(4)
<223> "Xaa" at location 4 stands for Thr or Ser

<220>
<221> MISC_FEATURE
<222> (5)..(5)
<223> "Xaa" at location 5 stands for Thr or Gly

<220>
<221> MISC_FEATURE
<222> (6)..(6)
<223> "Xaa" at location 6 stands for Ala or Ser

<220>
<221> MISC_FEATURE
<222> (7)..(7)
<223> "Xaa" at location 7 stands for Ala or Ser

<400> 33

```

Trp Gly Xaa Xaa Xaa Xaa Xaa Trp Phe Ala Tyr
1 5 10

```
<210> 34
<211> 7
<212> PRT
<213> Artificial

<220>
<223> light chain CDR3

<220>
<221> MISC_FEATURE
<222> (4)..(4)
<223> "Xaa" at location 4 stands for Thr or Ser
```

<220>
<221> MISC_FEATURE
<222> (6)..(6)
<223> "Xaa" at location 6 stands for Pro or Tyr

<400> 34

Tyr Tyr Gly Xaa Pro Xaa Thr
1 5